## AMENDMENTS TO CLAIMS

1.      (Currently Amended) A method of extending the capture range of a wavelength monitor

for the lasers of a wavelength division multiplex (WDM) transmission system wherein the

capture range comprises one wavelength period of a periodic error signal generated by the

wavelength filter, the capture range contains a desired wavelength of a plurality of equidistant

wavelengths, the lasers of the WDM transmission system are set at a desired wavelength by

comparing each ~~the~~ error signal with a comparison value, that is unique in the capture range for a

chosen slope sign, the wavelength period of the error signal is set such that it corresponds to

double the wavelength spacing of two adjacent wavelengths of the WDM transmission system

and the desired wavelength is set taking into account the slope sign of the error signal.


2.      (Original) A method according to claim 1, wherein a first intensity of a light component

of the laser light is directly measured and a second intensity of a light component of the laser

light passing through a Fabry perot (FP) interferometer is measured, where the irradiation into

the FP interferometer takes place at a specific angle to the optical axis unequal to 0.degree. and

the error signal is formed by linking the said intensities.


3.      (Original) A method according to claim 1, wherein a first intensity of a light component

of the laser light is directly measured, a second intensity of a light component of the laser light

passing through a FP interferometer is measured, where the irradiation into the FP interferometer

takes place parallel to the optical axis, a third intensity of the light component of the laser light

reflected by the FP interferometer is measured, and the error signal is formed by linking these

three intensities.

4.    (Currently Amended) A wavelength monitor with a wavelength filter and means of generating a periodic error signal for setting a laser, wherein the capture range of the irradiated wavelength comprises one wavelength period of the error signal and contains a desired wavelength of a plurality of equidistant wavelengths of a WDM transmission system, wherein the wavelength filter is set such that the wavelength period of the error signal corresponds to double the wavelength spacing of two adjacent wavelengths of the WDM transmission system, the wavelengths of the WDM transmission system lying exactly alternately on positive slopes and on negative slopes of the error signal and the desired wavelength set taking into account the positive and negative slopes of the error signal.

5.    (Original) A wavelength monitor according to claim 4, wherein the wavelength filter is implemented as a FP interferometer, where the means of generating the error signal consist of a first measuring means for measuring a first intensity of a direct light component of the laser light, a second measuring means for measuring a second intensity of a light component of the laser light passing through a FP interferometer, a third measuring means for measuring a third intensity of the light component of the laser light reflected by the FP interferometer, and calculating means for calculating the error signal from the intensities determined by the measuring means.

6.    (Original) A wavelength monitor according to claim 4, wherein the wavelength filter is implemented as a FP interferometer, where the means of generating the error signal consist of a

first measuring means for measuring a first intensity of a direct light component of the laser

light, a second measuring means for measuring a second intensity of a light component of the

laser light passing through a FP interferometer, and calculating means for calculating the error

signal from the intensities determined by the measuring means, the irradiation into the FP

interferometer taking place non-parallel to the optical axis of the FP interferometer.


7.      (Original)  A laser system with lasers and at least one wavelength monitor, wherein each

of the lasers is set at a desired wavelength with the aid of an error signal (E), wherein the

wavelength monitor is designed according to claim 4.